

ABSTRACT

Disclosed herein is an SRAM-compatible memory device performing a refresh operation having separate fetching and rewriting operation periods and a method of driving the SRAM-compatible memory device. During a first refresh period, the SRAM-compatible memory device performs an operation of fetching data from a DRAM cell to be refreshed. During a second refresh period, the SRAM-compatible memory device performs an operation of rewriting the data fetched during the first refresh period in the refreshed DRAM cell. Accordingly, the length of an assigned refresh period is reduced, and the length of an entire external access period is also reduced.